

December 22, 2003

IN THE APPLICATION

OF

**Joseph V. Ingraselino**

FOR

**NEW YEAR'S BALL DROP**

FILED WITH

THE UNITED STATES PATENT AND TRADEMARK OFFICE

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## **BACKGROUND OF THE INVENTION**

### **Field of the Invention**

The present invention relates generally to illuminated celebratory devices and, more specifically, to a New Year's Ball Dropping down a vertical support pole reaching the bottom at a predetermined time there by, activating the lights on a year display sign and flashing the ball lights to announce the onset of the New Year's Celebration.

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Description of the Prior Art

There are other illuminated devices designed for celebrations. Typical of these is U.S. Patent No. 6260989 issued to Joseph V. Ingraselino on July 17, 2001.

A second patent was issued to Lonnie Lawrence on February 11, 1997: U.S. Patent No. 5,601,361. A third U.S. Patent No. 5,090,789 was issued to Allen E. Crabtree on February 25, 1992 and a fourth was issued on June 21, 1983 to Robert M. Smith as U.S. Patent No. 4,389,589.

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U.S. Patent Number 6,260,989

Inventor: Joseph V. Ingraselino

Issued: July 17, 2001

A synchronized confetti sprayer and descending illuminated ball. An illuminated celebratory device having a confetti blower housing with LED digital display and other visual and sound effects mounted on top of a vertically standing pole having tracks thereon upon which a movable ball is mounted. The ball also has digital displays and lamps thereon. The pole is mounted on a base stand. In operating at a predetermined time the ball begins its descent from atop the pole and as it descends, pole lamps illuminate and the LED's show the appropriate time. When the ball reaches its destination at the bottom of the pole, LED's indicate the appropriate time and all celebratory features of the device activate.

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U.S. Patent Number 5,601,361

Inventor: Lonnie Lawrence

Issued: February 11, 1997

A movable and flexible net arranged in an MxN pattern is set forth. The pattern is defined by a plurality of parallel strands having eyelets therein to releasably engage and hold lamps in a light string. The net of the present disclosure, while supporting an attached light string, can be draped to any contour determined by a supportive surface, and can be likewise positioned in a deployed pattern with that contour or stored for later use. The net in the MxN rectangular pattern is formed of flexible strands to enable storage.

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U.S. Patent Number 5,090,789

Inventor: Allen E. Crabtree

Issued: February 25, 1992

A laser light show device and method produces a surface projected or suspended holographic image, and includes multiple image projectors. One image projector provides the object image information representing the primary subject. For surfaces projections, additional background image projectors provide background image information generated using a wobbler plate-reflected beam diffracted through a spherical lens, a beam undimensionally diffracted through a rotating cylindrical amorphic dipolyhedral, and a beam diffracted through multiple diffraction gratings. A suspended holographic is produced by parabolically focusing multiple images projected onto a spherical image screen.

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U.S. Patent Number 4,389,598

Inventor: Robert M. Smith

Issued: June 21, 1983

A disco light assembly which includes a multiplicity of individual electric lamps formed in a circle, or in any other appropriate configuration, and which are illuminated in any desired sequence in response to a disco beat. The individual lamps are preferably of the high intensity type, and each generates a shaft of light, preferably white, when illuminated. A common regulated power supply is provided which supplies a continuous filament current to all the lamps which is of sufficient amplitude to maintain the filaments in a warm state but insufficient to illuminate the lamps. Each lamp has its own control module connected to the common power supply, when a module is triggered; it causes a high current pulse to be introduced to the corresponding lamp for a few milliseconds, followed by a power current of sufficient intensity to illuminate the lamp. The power current continues for so long as the lamp is to be illuminated. A rapid turn-on circuit is included in each module, so that each lamp is turned on without creating any undue thermal stress in the lamp filament. However, the lamps turn off at a relatively slow rate. This obviates irritating strobe light effects.

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While these illuminated celebratory devices may be suitable for the purposes for which they were designed, they would not be as suitable for the purposes of the present invention, as hereinafter described.



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### **SUMMARY OF THE PRESENT INVENTION**

The present invention discloses an New Year's celebratory device mounted on top of a vertically standing pole having tracks thereon upon which a movable ball is slidably mounted. The lighted ball begins its descent, at a predetermined time, from atop the pole. When the ball reaches its destination at the bottom of the pole a sign displaying the new year lights up and the ball lights begin flashing.

A primary object of the present invention is to provide a New Year's Ball Drop wherein, the ball reaches the bottom of its vertical support post precisely at a predetermined time where upon a new year display sign lights up to announce the celebration of the New Year.

Another object of the present invention is to provide a New Year's Ball Drop having a multiplicity of lamps on or within the surface of the ball.

Yet another object of the present invention is to provide a New Year's Ball Drop tracking mechanism to guide the movement of the ball.

Still yet another object of the present invention is to provide a New Year's Ball Drop multiplicity of lamps on or with in the surface of a new year display sign i.e. "2004."

A further object of the present invention is to provide a New Year's Ball Drop including a timing device to assure the synchronicity of the ball reaching its

destination activating the new year display sign lights and flashing the ball lights with the accurate moment to celebrate.

The present invention overcomes the short comings of the prior art by providing a New Year's Ball Drop for the celebration of New Year's having an illuminated ball including a timing device assure the ball reaches its destination at a precise moment of celebration and lighting up a New Year display sign.

The foregoing and other objects and advantages will appear from the description to follow. In the description reference is made to the accompanying drawings, which form a part hereof, and in which is shown by way of illustration specific embodiments in which the invention may be practiced. These embodiments will be described in sufficient detail to enable those skilled in the art to practice the invention, and it is to be understood that other embodiments may be utilized and that structural changes may be made without departing from the scope of the invention. In the accompanying drawings, like reference characters designate the same or similar parts throughout the several views.

The following detailed description is, therefore, not to be taken in a limiting sense, and the scope of the present invention is best defined by the appended claims.

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### BRIEF DESCRIPTION OF THE DRAWINGS

In order that the invention may be more fully understood, it will now be described, by way of example, with reference to the accompanying drawings in which:

**Figure 1** is a front view of the present invention when showing the ball in the raised and ready position. A track mechanism runs through the vertical pole and is shown in hidden line. The new year display sign is not illuminated at this time.

**Figure 2** is a front view of the present invention activated. The ball lights are lit. The ball is ready to begin its descent down the vertical support pole.

**Figure 3** is a front view of the present invention in operation; shown is the ball in mid-descent.

**Figure 4** is a front view of the present invention after the ball has reached its destination. The year display sign is fully illuminated and the lights on the ball are flashing.

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LIST OF REFERENCE NUMERALS

With regard to reference numerals used, the following numbering is used throughout the drawings.

- 10     present invention
  
- 12     ball
  
- 14     ball lights
  
- 16     vertical support pole
  
- 18     track mechanism to guide the ball during its descent
  
- 20     new year display sign
  
- 22     display lights
  
- 24     power source
  
- 26     timed drive mechanism to power lowering the ball

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### DESCRIPTION OF THE PREFERED EMBODIMENT(S)

In order that the invention may be more fully understood, it will now be described, by way of example, with reference to the accompanying drawings in which **Figures 1** through **4** illustrate the present invention being a New Year's Ball Drop.

Turning to **Figure 1**, shown therein is a front view of the present invention **10** when dormant showing the ball **12** in the raised and ready position. A track mechanism **18** which guides the ball during its descent runs through the vertical support pole **16** and is shown in hidden line. Also shown are the ball lights **14**, and the new year display sign **20** having a multiplicity of display lights **22**. The ball drive mechanism **26** is shown as well as the power source **24**.

Turning to **Figure 2**, shown therein is a front view of the present invention **10** activated. The ball lights **14** are lit. The ball **12** is ready to begin its timed descent down the vertical support post **16**. Elements previously disclosed are also shown.

Turning to **Figure 3**, shown therein is a front view of the present invention **10** in operation. Shown is the ball **12** in mid-descent with all ball lights **14** lit. Elements previously disclosed are also shown.

Turning to **Figure 4**, shown therein is a front view of the present invention **10** in full operation after the ball **12** has reached its destination. The ball lights **14** are flashing. The new year display lights **12** are illuminated showing the New Year. Elements previously shown are also shown.